Background and importance Adherence is one of the most important variables for achieving the benefits of antiretroviral treatment (ART) since effectiveness and safety of current treatments are optimal.

Adherence can be measured by direct methods, which consist of measuring the substances in biological samples, or by indirect methods based on patient interviews and dispensing records.

Indirect methods have the advantages of simplicity, an easier application in daily clinical practice and lower costs.

Aim and objectives The objectives of this study were to describe ART adherence in people living with human immunodeficiency virus (HIV) and to analyse the correlation and the concordance between two indirect methods used to measure adherence: a simple single item rating scale answered with a visual analogue scale (SIRS-VAS) and the medication possession rate (MPR).

Material and methods Multicentre (5 centres), observational, prospective and cross-sectional study. We enrolled adult people living with HIV (PLHIV) on ART.

The adherence was measured using two indirect methods. One was a SIRS-VAS about the percentage of ART taken in the previous month. The other method was the MPR, calculated over the previous 6 months from dispensing records.

MPR (%) = (days covered with dispensed medication/time interval)*100.

For studying the adherence as a qualitative variable, different cut-off points were established on the SIRS-VAS and the MPR, classifying participants as adherent or non-adherent.

Spearman correlation coefficient (r) was studied between quantitative variables. Cohen’s kappa concordance coefficient (k) was studied between qualitative variables.

P values under 5% were considered statistically significant.

Results We enrolled 128 participants, aged 20–81 years (x=46.9±11.7); 112 men, 14 women, and 2 non-binary people.

The mean±SD MPR was 96.8±7.0%. The mean±SD SIRS-VAS score was 96.9±5.8%. There was a modest correlation between both measures (r= 0.31, p<0.001).

We observed the following qualitative concordance results between both measures:

<table>
<thead>
<tr>
<th>Adherence cut-off point</th>
<th>k</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>0.318</td>
<td>0.000</td>
</tr>
<tr>
<td>90%</td>
<td>0.280</td>
<td>0.001</td>
</tr>
<tr>
<td>85%</td>
<td>0.127</td>
<td>0.145</td>
</tr>
<tr>
<td>80%</td>
<td>−0.030</td>
<td>0.724</td>
</tr>
</tbody>
</table>

Conclusion and relevance According to the results of both the SIRS-VAS and the MPR the adherence to ART in our population is optimal. The correlation between the SIRS-VAS and the MPR was only modest. The concordance between both measures was higher for people with high adherence results.

References and/or acknowledgements Conflict of interest No conflict of interest

Impact of knowledge about human immunodeficiency virus (HIV) transmission on the quality of life of people living with HIV

Background and importance Prejudices about sexually transmitted infections and misinformation about their transmission cause people living with human immunodeficiency virus (HIV) to continue to suffer social stigma. Social stigma can have a significant impact on mental health, global health, adherence to antiretroviral treatment and the quality of life (QoL) of these individuals.

Aim and objectives The aim of this study was to analyse the impact of knowledge about HIV transmission on the QoL of people living with HIV (PLHIV) to justify future interventions.

Material and methods Multicentre (5 centres), observational, prospective and cross-sectional study. We included adult PLHIV on antiretroviral treatment. Participants with less than 3 months since diagnosis were excluded.

The QoL was quantified using the validated WHOQOL-BREF questionnaire, consisting of 26 questions, directly scored from 1 to 5, with the exception of questions 3, 4 and 26, which are inversely scored. Results are directly proportional to the QoL. This questionnaire is divided into components: ‘Self-Perception of QoL’ (SPQoL), ‘Self-Perception of Health’ (SPH), ‘Physical Health’ (PH), ‘Psychological’ (Ps), ‘Social Relationships’ (SR) and ‘Environment’ (E). Results for each component are achieved by totalling the values of the items that comprise it.

Knowledge about HIV transmission was evaluated using an a priori questionnaire of 20 statements, to be responded to with ‘true’ or ‘false’. Results were the percentages of correct answers, considering as optimal knowledge results greater than or equal to 80%.

References and/or acknowledgements Conflict of interest No conflict of interest
Associations between quantitative and qualitative variables were analysed with Student’s t-test or Mann-Whitney U test, based on normality tests. P values under 5% were considered statistically significant.

**Results** We enrolled 133 participants, aged 20–81 years old (X=46.8±11.7); 115 men, 16 women and 2 non-binary people.

The mean WHOQOL-BREF score was 3.54/5 (SPQoL=3.7/5; SPH=3.6/5; PH=3.5/5; Ps=3.6/5; SR=3.3/5; E=3.6/5).

The knowledge evaluation obtained an average of 87.1 ±10.6% of correct answers. 104 participants (78.2%) had optimal knowledge.

PLHIV with suboptimal knowledge reported worse QoL (ΔX=9.1, 95% CI 3.4 to 14.9; p=0.002) including SPQoL (ΔX=0.6, 95% CI 0.2 to 0.9; p=0.001), PH (ΔX=2.4, 95% CI 0.7 to 4.2; p=0.006), SR (ΔX=1.3, 95% CI 0.3 to 2.3; p=0.011) and E (ΔX=2.9, 95% CI 1.1 to 4.6; p=0.002).

**Conclusion and relevance** The results of this study justify the need for health education interventions in PLHIV who have suboptimal knowledge about HIV transmission in order to improve their quality of life.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

Conflict of interest No conflict of interest

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**4CPS-245**

**HUMAN IMMUNODEFICIENCY VIRUS PRE-EXPOSURE PROPHYLAXIS: ANALYSIS, FOLLOW-UP AND PANDEMIC EFFECT**

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**Background and importance** In 2019, the National Health System (NHS) approved funding for the indication of pre-exposure prophylaxis (PrEP) as a strategy to prevent human immunodeficiency virus (HIV) infection in high-risk populations. The hospital pharmacy (HP), together with the Sexually Transmitted Infection (STI) centre, has created an interdisciplinary circuit where these individuals are closely monitored.

**Aim and objectives** To characterise the user population of the HIV PrEP programme and assess the adequacy of the circuit, as well as the impact of the SARS-CoV-2 pandemic.

**Material and methods** Retrospective observational study of the PrEP programme from November 2019 to April 2021 carried out in the provincial STI centre and the HP.

The following were assessed: compliance with inclusion criteria, adherence to treatment and causes of discontinuation, toxicity, acquisition of STIs, and interactions. Also variations during confinement and degree of involvement by COVID.

**Results** 169 males, aged 39.6±10.0 (range 19–64) years, all at least one inclusion criterion in the last year: 75.7% (n=128) men who have sex with men (MSM) with more than 10 different sexual partners, 71.6% (n=121) MSM anal sex without condoms, 17.1% (n=29) MSM drug use, 10.7% (n=18) MSM with multiple PreP, 74.0% (n=125) MSM with at least one STI and one engaged in prostitution.

30 clients discontinued medication: 33.3% (n=10) stopped risky practices, 20.0% (n=6) digestive toxicity (main adverse effect), 3.3% (n=1) poor adherence, 16.7% (n=5) client choice and 26.7% (n=8) drop out of follow-up. Mean adherence was 94.5±11.4.

No patients acquired HIV during treatment, but other STIs were found (several users reported reduced of condom use): 36.7% (n=11) Treponema pallidum, 56.7% (n=17) Chlamydia trachomatis, 63.3% (n=19) Neisseria gonorrhoeae and 36.7% (n=11) Mycoplasma genitalum.

This was a young population that does a lot of physical exercise and after the clinical interview it was discovered they were abusing protein shakes and anabolic steroids, therefore they were warned about it.

During the confinement, 41 users were in treatment. Of the 37 who continued, 4 suffered from COVID.

**Conclusion and relevance** The programme meets the requirements of the NHS, with high adherence to treatment and a good safety profile.

Patients continued with PreP during confinement and there was a significant number affected by COVID.

Clinical pharmaceutical follow-up has allowed preventive and corrective interventions, but more emphasis should be placed on the use of condoms and avoiding anabolic steroids given the possible renal repercussions.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

Conflict of interest No conflict of interest

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**4CPS-242**

**INAPPROPRIATE ANTIBIOTIC DOSAGE ADJUSTMENTS IN PATIENTS WITH RENAL IMPAIRMENT: A CROSS-SECTIONAL ANALYSIS**

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**Background and importance** Adequate dose titration in patients with renal impairment is crucial to avoid adverse effects and to achieve therapeutic goals. Dose reduction at baseline is not recommended to achieve desired plasma levels and to prevent the development of resistance.

**Aim and objectives** To assess the inadequacy of prescribed antibiotic doses according to renal function and to identify the medical services involved.

**Material and methods** Cross-sectional, descriptive study. All patients over 18 years of age with antibiotics prescribed on the day of the cut-off requiring adjustment according to renal function were included; patients admitted to the intensive care unit were excluded. The variables age, sex, prescribing specialty, antibiotic, dose and glomerular filtration rate were collected. Each prescription was reviewed according to our teaching hospital guidelines. Medical history and electronic prescription program were used for data collection.

**Results** 227 prescriptions for 200 patients (54% men, mean age 68 years) were reviewed. 9.7% of these prescriptions were not correctly adjusted for glomerular filtration rate. Of these, piperacillin/tazobactam was the most commonly prescribed antibiotic with an inadequate dose (45.5%), followed by amoxicillin/clavulanate (27.3%), meropenem (13.6%), vancomycin (9.1%) and gentamicin (4.5%).

The type of adjustment required would have been: dose adjustment (50%), interval modification (27.3%), and both (22.7%). 72.7% of these prescriptions were underdosed and 27.3% overdosed.